differences are thought to depend on the fact that the breasts were brought into active function, while the mouth, teeth, and scalp are very frequently neglected and the site of pathological conditions. In none of these cases could it be observed that new lymphatics developed during pregnancy.

GYNECOLOGY.

UNDER THE CHARGE OF

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The Histological and Clinical Significance of Malignant Chorioepithelioma.—SCHMAUCH (*Surg., Gyn.,* and *Obst.,* 1907, v, 259) considers this subject very fully and declares that not always is chorioepithelioma malignant. Polano has expressed the belief, after a very careful analysis of all the cases of this disease in which successful operations had been performed, that 50 per cent. of the patients would have recovered without operation. Schmauch believes that every case of so-called surgical cure would have recovered spontaneously. He sums up as follows: The chorioepithelial proliferations described in literature as chorioepithelioma malignum have nothing in common with a malignant growth, as generally interpreted. On the other hand, the whole doctrine of chorioepithelioma proves a great support of Ribbert's theory of the development of carcinoma. Epithelial cell complexes, torn from their origin and deported, proliferate and form a kind of autonomous growth. There is only a gradual difference between the simple invasion of the uterine muscles by villi and their sequels, such as adherent placenta, the common and destructive placentary polyp, and the common and destructive mole; between the localized chorioepithelial growths, limited to the uterus and the placental region, and the villous infarcts, developed by deportation of villi; and finally between those cases in which the lungs are able to retain and master the scattered fœtal cells (mostly syncytial and atypical forms), and the typical chorioepithelioma malignum, which becomes generalized through general metastases. Only the latter two types deserve the name of malignant chorioepithelioma.

In recent publications concerning chorioepitheliomatous proliferations in the male, a tendency is to be noticed to regard those cases of generalized chorioepithelioma, in which the uterus and adnexa proved free from growth, as of teratoid genesis. However, as the connection with pregnancy is an established fact, we have no right to hunt for complicated theories. In many of the cases, in which the uterus was free from growth, a closer examination probably would have revealed smaller neoplastic foci in the parametrium. All the enumerated conditions are sequels of pregnancy. We deal with proliferations that trespass the physiological limits necessary for the development of the fertilized ovum and therefore become pathological. Fœtal cells and villi, which normally invade the uterine mucosa to bring about fixation of the ovum and further development, pervade the musculature of the uterus, become deported into vaginal veins, and finally lead to the death of the bearer by general dissemination. Between the physiological embolism of placentary cells and the typical malignant chorioepithelioma there is only a gradual difference. Schmorl states expressly that small metastatic foci from a malignant chorioepithelioma cannot be differentiated microscopically from chorioepithelial embolism found in a vesicular mole.

Whether a badly nourished inferior mucosa facilitates the invasion of the villi, and leads to adherent placenta and placentary polyp or not, is mere speculation. Whenever villi have invaded intramuscular bloodvessels (not intravillous spaces), a deportation of villi or larger placentary cell complexes is rendered easy. When retrograde deportation in the external genitalia takes place, it will become manifest to the naked eye, and when deported into the lungs bloody expectoration will result. It is very probable that a number of the small-sized hematomas of the vulva and vagina, the so-called "thrombus vaginæ," are caused by villous infarcts. Older German text-books of obstetrics, for instance that of Spiegelberg, speak of such hematomas appearing during pregnancy, and some days after labor. While the development during labor was easily understood, in the other forms a friability of the bloodvessels was supposed to be the cause. It sounds strange to read reports of such patients, and hear of the protracted convalescences and of the grave alteration of the general conditions.

The so-called vaginal metastases, appearing after an operation, from which the patient recovers completely, seem at first sight absolutely malignant. They become easily understood, however, when one assumes that they were already deposited at the time of the operation, but did not become manifest until the insult, connected with the operative interference, led to the formation of a hematoma. The presence of villi in a villous infarct is not absolutely necessary for that diagnosis. They might become absorbed, or at other times it is possible that they will not be found. Among 11 cases classified by me as villous infarcts, villi were present 8 times.

When chorioepithelioma is regarded as a cellular injection and not as a true neoplasm, it will be useless to search for histological marks, proving malignancy or benignity. As the typical as well as the syncytial form may present all the different stages, we will never be able to render a definite opinion upon the eventful malignancy of the process from an extirpated vaginal nodule or uterus. The prognosis should always be guarded. As in bacterial infection, the seriousness of the invasion will be judged by the general, clinical symptoms, and not so much by the appearance of the diseased part of the body.

As the results become evident from the tabulation of the cases, only a few facts will be mentioned here: (1) The malignancy of the generalized chorioepithelioma and the prevalence of the typical chorioepithelioma among this class. (2) The lesser malignancy of the transition form syncytial chorioepithelioma (predominance of large syncytial cells besides Langhans' cells and syncytium). (3) The harmlessness of the atypical chorioepithelioma. Among the 206 tabulated cases, I find 10 which I regard as atypical chorioepithelioma consisting of large cells only, without admixture of Langhans' cells and syncytium. 14 of them recovered after operation and 5 died. In 2 of these 5, sepsis is given as cause of death, in 1 nephritis, and in another one death soon followed the operation, while in the fifth the cause of death is not stated. There is so far not one case of generalization in an atypical chorioepithelioma reported. (4) The comparative benignity of all those cases in which villi were found in the extirpated uterus or in the vaginal infarcts. (5) While 43 cases of chorioepithelioma that proved to be malignant were preceded by abortion, only 24 followed molar pregnancy. Again, while 39 operated and recovered cases were preceded by mole, only 11 cases recovered after labor at term. On the other hand, 30 cases are recorded that died of malignant chorioepithelioma following full-term labor. Herewith is proved the frequency of chorioepithelial proliferation after mole and the danger of sepsis and exsanguination in destructive mole and placentary polyp, but not the histological malignancy of such relatively frequent proliferations. (6) The great importance of an exact anamnesis in judging the histological dignity of proliferations of the cells forming the cell-cover of villi.

Schmauch expresses great regret that gynecologists have considered the histology of so much greater importance than the symptomatology, which Schmauch considers should be reversed.

Postoperative Thrombosis and Embolism.—MILLER (*Amer. Jour. Obst.*, 1907, lvi, 347) classes the causes of postoperative thrombosis and embolism as follows: (1) Inflammatory thrombi, which are produced through acute or chronic inflammation of the wall of the heart or bloodvessels. As a consequence of the inflammation, the wall is thickened and the endothelium injured. (2) Traumatic thrombi produced through injuries to the vessel wall. To this classification belong those thrombi caused by ligation, severing, or tearing of the vessel. (3) Compression or dilatation thrombi, which are caused by slowing or stagnation of the blood stream. The compression can arise by the pressure of tumors, exudates, etc., and the dilatation may be due to actual disease, loss of elasticity, or excessive thinning of the vessel wall. Certain cardiac thrombi probably come under this head. (4) Marantic thrombi, which are due to diseased conditions of the blood, degeneration or weakness of the heart, and slowing of the blood stream.

Miller refers to the interesting experiments of Carrel and Guthrie on the anastomosis of bloodvessels and the transplantation of viscera as strongly indicating that infection and injury to the vessel wall are of primary importance etiologically. They found that in animals operated upon, in which the technique was rigid and the endothelium of the bloodvessels accurately adapted, thrombosis occurred but rarely. This does not explain the predilection of certain vessels to produce thrombi. Probably all the causes mentioned enter into most cases. Certainly they are most commonly formed when operations have been done for myoma or carcinoma of the uterus or ovarian tumors of prodigious proportions. Miller considers that the abnormal blood conditions notoriously present in these cases are the chief causes in them. He also lays stress upon the enlargement or dilatations of bloodvessels resulting from tumor pressure, as being a potent etiological factor, and he refers to the long oblique course of the iliac vein across the pelvis